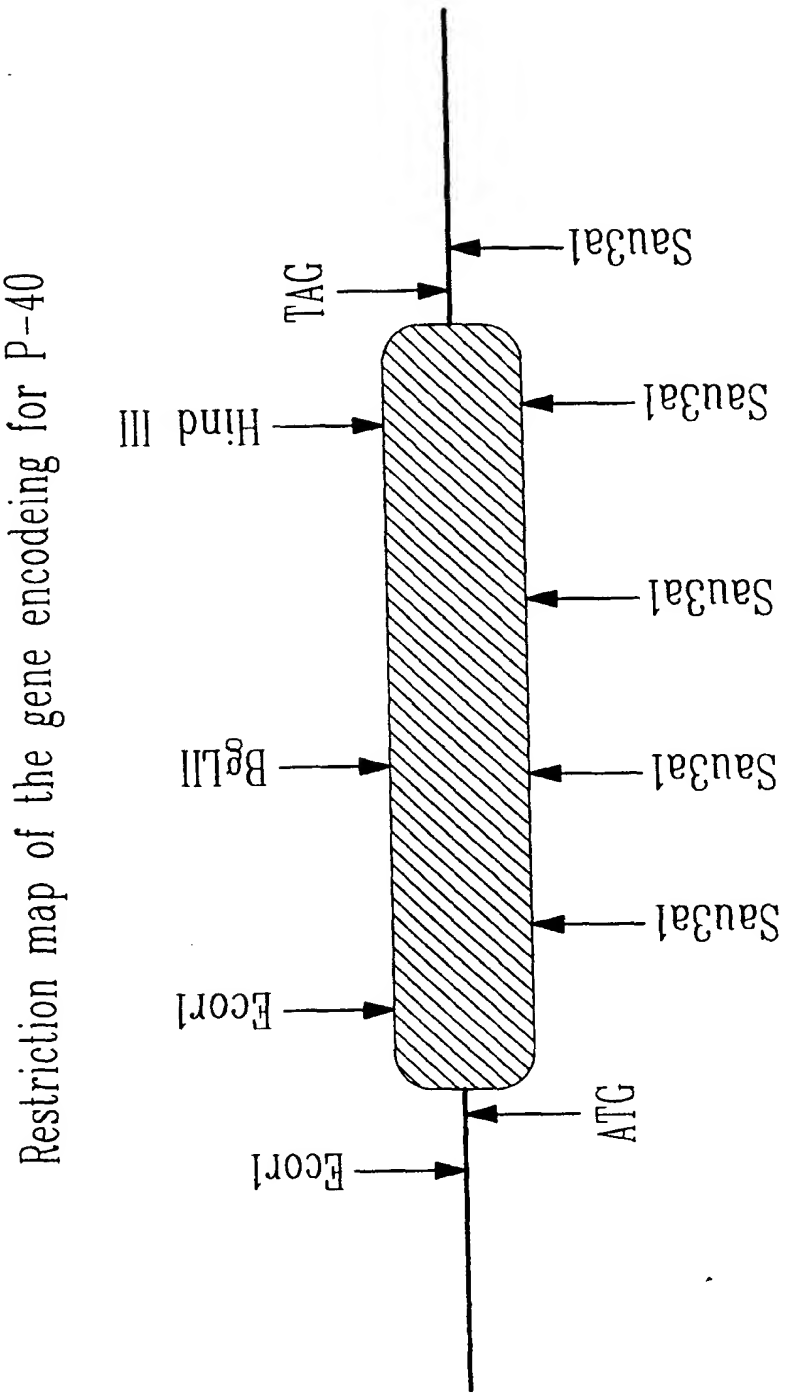
FIG - 1A


Restriction map of the gene encodeing for P-40
Sau3al
TAG
Sau3al
Hind III
Sau3al
Sau3al
BglII
Sau3al
EcorI
ATG
EcorI

```
ORIGIN
    1 agtgtgaaat cttcagagaa gaatttctct ttagttcttt gcaagaaggt agagataaag
   61 acactttttc aaaaatggca atggtatcag aattcctcaa gcaggcctgg tttattgaaa
  121 atgaagagca ggaatatgtt caaactgtga agtcatccaa aggtggtccc ggatcagcgg
  181 tgagccccta tcctaccttc aatccatcct cggatgtcgc tgccttgcat aaggccataa
  241 tggttaaagg tgtggatgaa gcaaccatca ttgacattct aactaagcga aacaatgcac
  301 agcgtcaaca gatcaaagca gcatatctcc aggaaacagg aaagcccctg gatgaaacac
  361 ttaagaaagc ccttacaggt caccttgagg aggttgtttt agctctgcta aaaactccag
  421 cgcaatttga tgctgatgaa cttcgtgctg ccatgaaggg ccttggaact gatgaagata
  481 ctctaattga gattttggca tcaagaacta acaaagaaat cagagacatt aacagggtct
  541 acagagagga actgaagaga gatctggcca aagacataac ctcagacaca tctggagatt
  601 ttcggaacgc tttgctttct cttgctaagg gtgaccgatc tgaggacttt ggtgtgaatg
  661 aagacttggc tgattcagat gccagggcct tgtatgaagc aggagaaagg agaaagggga
```

FIG. 1B

```
 721 cagacgtaaa cgtgttcaat accatcctta ccaccagaag ctatccacaa cttcgcagag
 781 tgtttcagaa atacaccaag tacagtaagc atgacatgaa caaagttctg gacctggagt
 841 tgaaaggtga cattgagaaa tgcctcacag ctatcgtgaa gtgcgccaca agcaaaccag
 901 ctttcttttgc agagaagctt catcaagcca tgaaagggtgt tggaactcgc cataaggcat
 961 tgatcaggat tatggtttcc cgttctgaaa ttgacatgaa tgatatcaaa gcattctatc
1021 agaagatgta tggtatctcc ctttgccaag ccatcctgga tgaaaccaaa ggagattatg
1081 agaaaatcct ggtggctctt tgtggaggaa actaaacatt cccttgatgg tctcaagcta
1141 tgatcagaag actttaatta tatattttca tcctataagc ttaaatagga aagtttcttc
1201 aacaggatta cagtgtagct acctacatgc tgaaaaatat agcctttaaa tcatttttat
1261 attataactc tgtataatag agataagtcc attttttaaa aatgttttcc ccaaaccata
1321 aaaccctata caagttgttc tagtaacaat acatgagaaa gatgtctatg tagctgaaaa
1381 taaaatgacg tcacaagac
```

FIG-1C

MAMVSEFLKQAWFIENEEQEYVQTVKSSKGGPGSAVSPYPTFNPSSDVAALHKAIMVK

GVDEATIIDILTKRNNAQRQQIKAAYLQETGKPLDETLKKALTGHLEEVVLALLKTPA

QFDADELRAAMKGLGTDEDTLIEILASRTNKEIRDINRVYREELKRDLAKDITSDTSG

DFRNALLSLAKGDRSEDFGVNEDLADSDARALYEAGERRKGTDVNVFNTILTTRSYPQ

LRRVFQKYTKYSKHDMNKVLDLELKGDIEKCLTAIVKCATSKPAFFAEKLHQAMKGVG

TRHKALIRIMVSRSEIDMNDIKAFYQKMYGISLCQAILDETKGDYEKILVALCGGN

Fig - 10

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09/529925

000270 92662960

```
          10        20        30        40        50        60
           *         *         *         *         *         *
3' GTAGCGACCGGCGCTCAGCTGGAATTCGCGGCCGCGTCGATTTTTTTGTCTTGTGACGTCATTTTATT
5' CATCGCTGGCCGCGAGTCGACCTTAAGCGCCGGCGCAGCTAAAAAAACAGAACACTGCAGTAAAATAA
    A T G A Q L E F A A A S I F L S C D V I L F>
  * R P A L S W N S R P R R F F C L V T S F Y>
   S D R R S A G I R G R V D F F V L * R H F I>
 <Y R G A S L Q F E R G R R N K Q R T V D N * K
  <A V P A * S S N A A A D I K K D Q S T M K N
 <L S R R E A P I R P R T S K K T K H R * K I

 70        80        90       100       110       120       130
  *         *         *         *         *         *         *
 TTCAGCTACATAGACATCTTTCTCATGTTACTAGAACAACTTGTATAGGGTTTTATGGTTTGGGGAAA
 AAGTCGATGTATCTGTAGAAAGAGTACAATGATCTTGTTGAACATATCCCAAAATACCAAACCCCTTT
  S A T * T S F S C Y * N N L Y R V L W F G E>
 F Q L H R H L S H V T R T T C I G F Y G L G K>
  F S Y I D I F L M L L E Q L V * G F M V W G K>
  <* S C L C R E * T V L V V Q I P N * P K P F
 <E A V Y V D K E H * * F L K Y L T K H N P S F
<K L * M S M K R M N S S C S T Y P K I T Q P F
```

Fig. 1E

SUBSTITUTE SHEET (RULE 26)

```
  140        150        160        170        180        190        200
   *          *          *          *          *          *          *
ACATTTTTAAAAAATGGACTTATCTCTATTATACAGAGTTATAATATAAAAATGATTTAAAGGCTATA
TGTAAAAATTTTTTACCTGAATAGAGATAATATGTCTCAATATTATATTTTTACTAAATTTCCGATAT
N  I  F  K  K  W  T  Y  L  Y  Y  T  E  L  *  Y  K  N  D  L  K  A  I>
 T  F  L  K  N  G  L  I  S  I  I  Q  S  Y  N  I  K  M  I  *  R  L  Y>
  H  F  *  K  M  D  L  S  L  L  Y  R  V  I  I  *  K  *  F  K  G  Y>
<V  N  K  F  F  P  S  I  E  I  I  C  L  *  L  I  F  I  I  *  L  S  Y
  <M  K  L  F  H  V  *  R  *  *  V  S  N  Y  Y  L  F  S  K  F  A  I
 <C  K  *  F  I  S  K  D  R  N  Y  L  T  I  I  Y  F  H  N  L  P  *  I

   210        220        230        240        250        260        270
    *          *          *          *          *          *          *
TTTTTCAGCATGTAGGTAGCTACACTGTAATCCTGTTGAAGAAACTTTCCTATTTAAGCTTATAGGAT
AAAAAGTCGTACATCCATCGATGTGACATTAGGACAACTTCTTTGAAAGGATAAATTCGAATATCCTA
 F  F  S  M  *  V  A  T  L  *  S  C  *  R  N  F  P  I  *  A  Y  R  M>
  F  S  A  C  R  *  L  H  C  N  P  V  E  E  T  F  L  F  K  L  I  G>
I  F  Q  H  V  G  S  Y  T  V  I  L  L  K  K  L  S  Y  L  S  L  *  D>
 <K  E  A  H  L  Y  S  C  Q  L  G  T  S  S  V  K  R  N  L  S  I  P  H
<N  K  L  M  Y  T  A  V  S  Y  D  Q  Q  L  F  K  G  I  *  A  *  L  I
 <K  *  C  T  P  L  *  V  T  I  R  N  F  F  S  E  *  K  L  K  Y  S
```

FIG. 1F

000620 - 92662560


```
     280        290        300        310        320        330        340
      *          *          *          *          *          *          *
GAAAATATATAATTAAAGTCTTCTGATCATAGCTTGAGACCATCAAGGGAATGTTTAGTTTCCTCCAC
CTTTTATATATTAATTTCAGAAGACTAGTATCGAACTCTGGTAGTTCCCTTACAAATCAAAGGAGGTG
  K  I  Y  N  *  S  L  L  I  I  A  *  D  H  Q  G  N  V  *  F  P  P>
*  K  Y  I  I  K  V  F  *  S  *  L  E  T  I  K  G  M  F  S  F  L  H>
 E  N  I  *  L  K  S  S  D  H  S  L  R  P  S  R  E  C  L  V  S  S  T>
 <F  Y  I  I  L  T  K  Q  D  Y  S  S  V  M  L  P  I  N  L  K  R  W
<F  I  Y  L  *  L  R  R  I  M  A  Q  S  W  *  P  F  T  *  N  G  G  C
<S  F  I  Y  N  F  D  E  S  *  L  K  L  G  D  L  S  H  K  T  E  E  V

     350        360        370        380        390        400
      *          *          *          *          *          *
AAAGAGCCACCAGGATTTTCTCATAATCTCCTTTGGTTTCATCCAGGATGGCTTGGCAAAGGGAGATA
TTTCTCGGTGGTCCTAAAAGAGTATTAGAGGAAACCAAAGTAGGTCCTACCGAACCGTTTCCCTCTAT
Q  R  A  T  R  I  F  S  *  S  P  L  V  S  S  R  M  A  W  Q  R  E  I>
 K  E  P  P  G  F  S  H  N  L  L  W  F  H  P  G  W  L  G  K  G  R  Y>
  K  S  H  Q  D  F  L  I  I  S  F  G  F  I  Q  D  G  L  A  K  G  D>
<L  S  G  G  P  N  E  *  L  R  R  Q  N  *  G  P  H  S  P  L  P  L  Y
 <L  A  V  L  I  K  E  Y  D  G  K  T  E  D  L  I  A  Q  C  L  S  I
<F  L  W  W  S  K  R  M  I  E  K  P  K  M  W  S  P  K  A  F  P  S  V
```

FIG. 16

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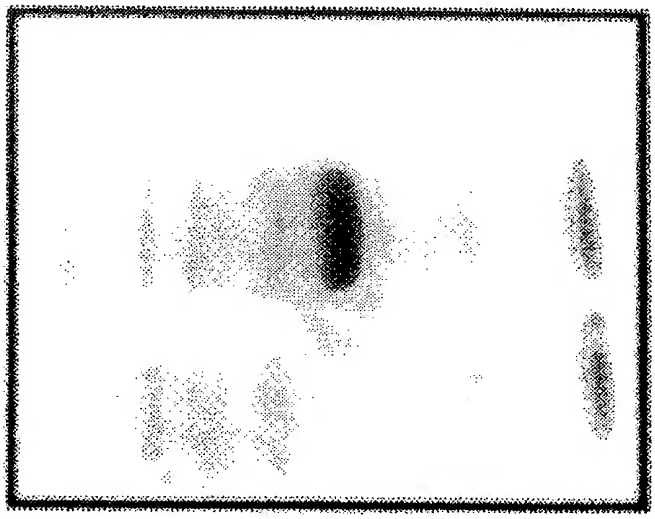
SUBSTITUTE SHEET (RULE 26)

```
410         420         430         440         450         460         470
  *           *           *           *           *           *           *
 CCATACATCTTCTGATAGAATGCTTTGATATCATTCATGTCAATTTCAGAACGGGAAACCATAATCCT
 GGTATGTAGAAGACTATCTTACGAAACTATAGTAAGTACAGTTAAAGTCTTGCCCTTTGGTATTAGGA
  P  Y  I  F  *  *  N  A  L  I  S  F  M  S  I  S  E  R  E  T  I  I  L>
   H  T  S  S  D  R  M  L  *  Y  H  S  C  Q  F  Q  N  G  K  P  *  S>
 T  I  H  L  L  I  E  C  F  D  I  I  H  V  N  F  R  T  G  N  H  N  P>
 <W  V  D  E  S  L  I  S  Q  Y  *  E  H  *  N  *  F  P  F  G  Y  D  Q
<G  Y  M  K  Q  Y  F  A  K  I  D  N  M  D  I  E  S  R  S  V  M  I  R
  <M  C  R  R  I  S  H  K  S  I  M  *  T  L  K  L  V  P  F  W  L  G

 480         490         500         510         520         530         540
   *           *           *           *           *           *           *
 GATCAATGCCTTATTGCGAGTTCCAACACCTTTCATGGCTTGATGAAGCTTCTCTGCAAAGAAAGCT 5'
 CTAGTTACGGAATAACGCTCAAGGTTGTGGAAAGTACCGAACTACTTCGAAGAGACGTTTCTTTCGA 3'
  I  N  A  L  L  R  V  P  T  P  F  M  A  *  *  S  F  S  A  K  K  A>
* S  M  P  Y  C  E  F  Q  H  L  S  W  L  D  E  A  S  L  Q  R  K  L>
 D  Q  C  L  I  A  S  S  N  T  F  H  G  L  M  K  L  L  C  K  E  S  X>
  <D  I  G  *  Q  S  N  W  C  R  E  H  S  S  S  A  E  R  C  L  F
<I  L  A  K  N  R  T  G  V  G  K  M  A  Q  H  L  K  E  A  F  F  A
<S  *  H  R  I  A  L  E  L  V  K  *  P  K  I  F  S  R  Q  L  S  L
```

Fig. 1H



SUBSTITUTE SHEET (RULE 26)

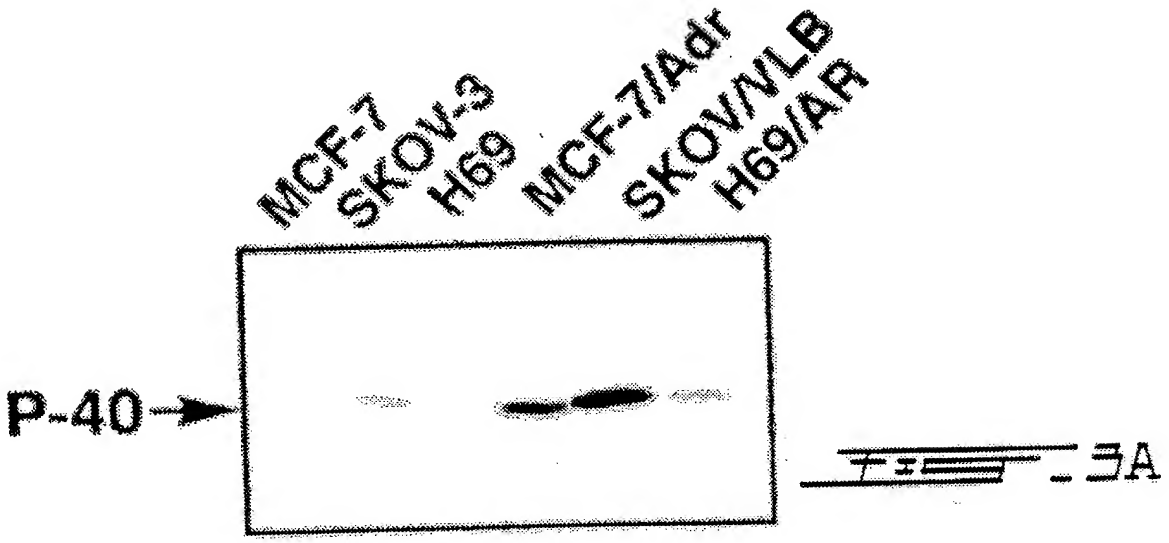

MCF-7
SKOV-3
H69
MCF-7/Adr
SKOV/VLB
H69/AR
P-40

Fig 3A

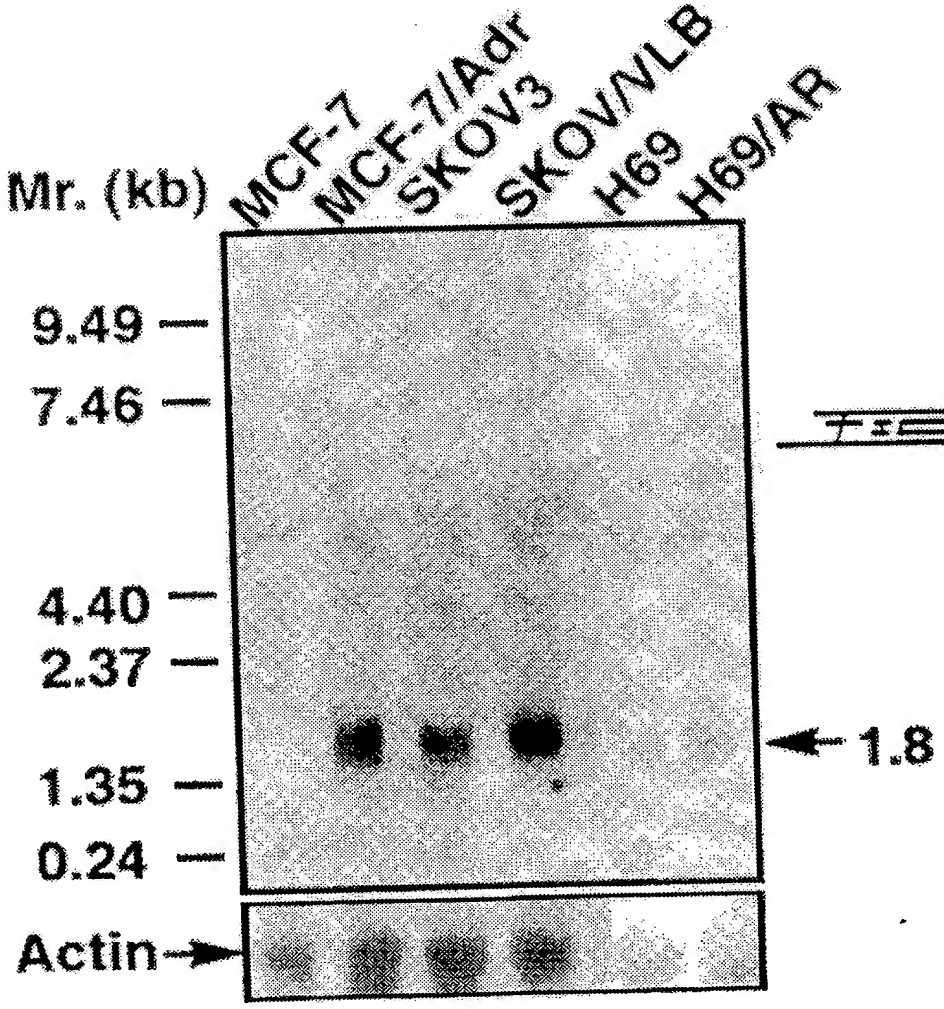

Mr. (kb)
MCF-7
MCF-7/Adr
SKOV3
SKOV/VLB
H69
H69/AR
9.49
7.46
4.40
2.37
1.35
0.24
1.8
Actin

Fig 3B

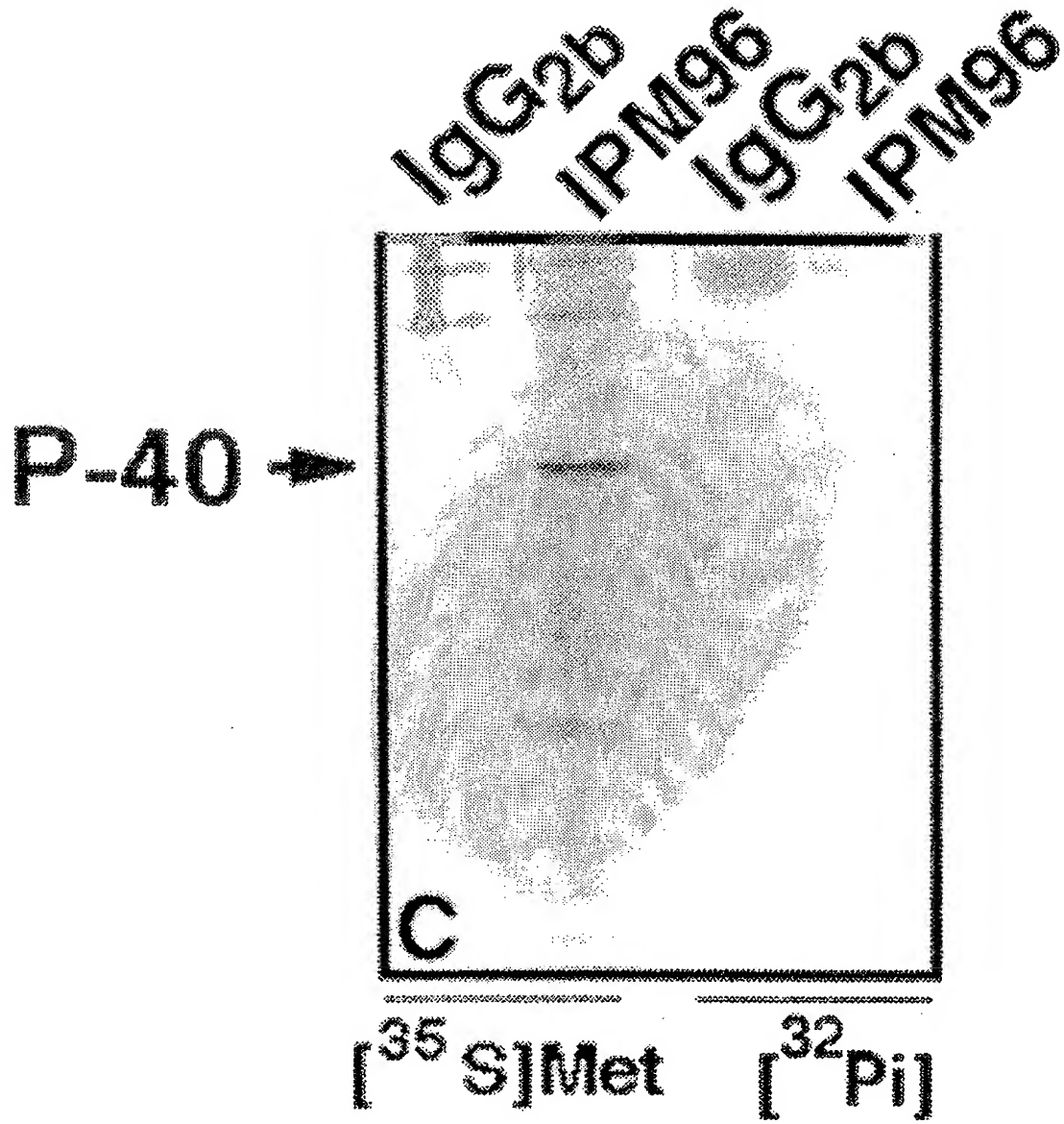


Fig. 4

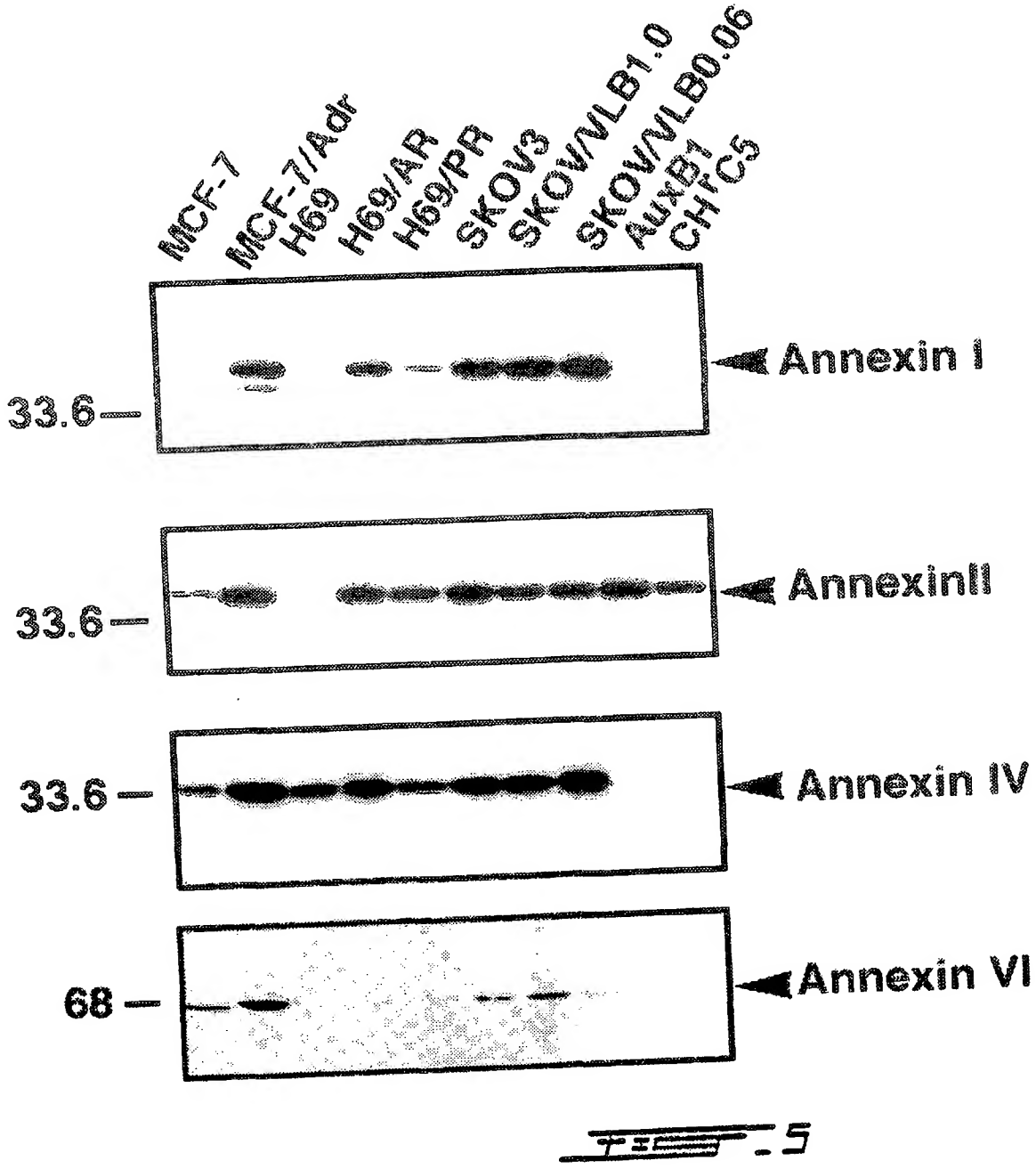

MCF-7
MCF-7/Adr
H69
H69/AR
H69/PR
SKOV3
SKOV/VLB1.0
SKOV/VLB0.06
AuxB1
CHFC5
33.6
Annexin I
33.6
AnnexinII
33.6
Annexin IV
68
Annexin VI

FIG - 5

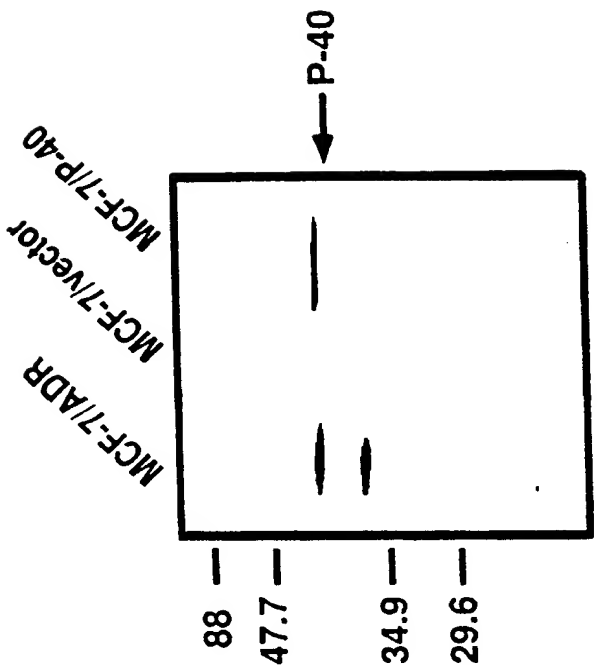


FIG - 6A

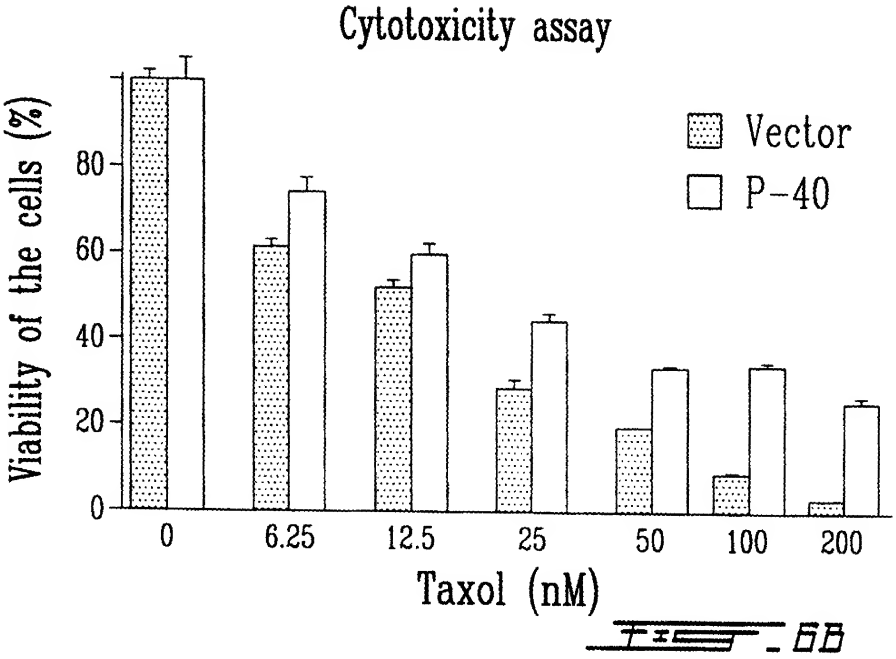

Cytotoxicity assay
Viability of the cells (%)
0
20
40
60
80
Vector
P-40
0
6.25
12.5
25
50
100
200
Taxol (nM)

FIG. 6B

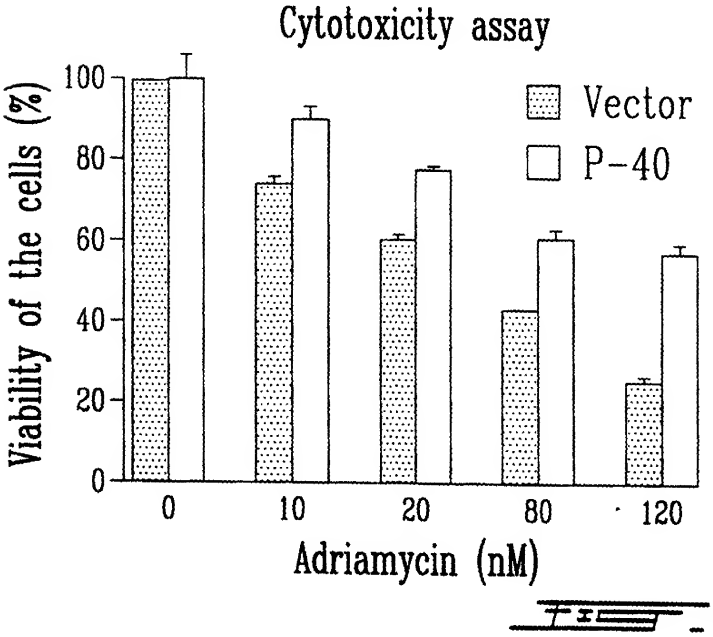

Cytotoxicity assay
Viability of the cells (%)
0
20
40
60
80
100
Vector
P-40
0
10
20
80
120
Adriamycin (nM)

FIG. 6C

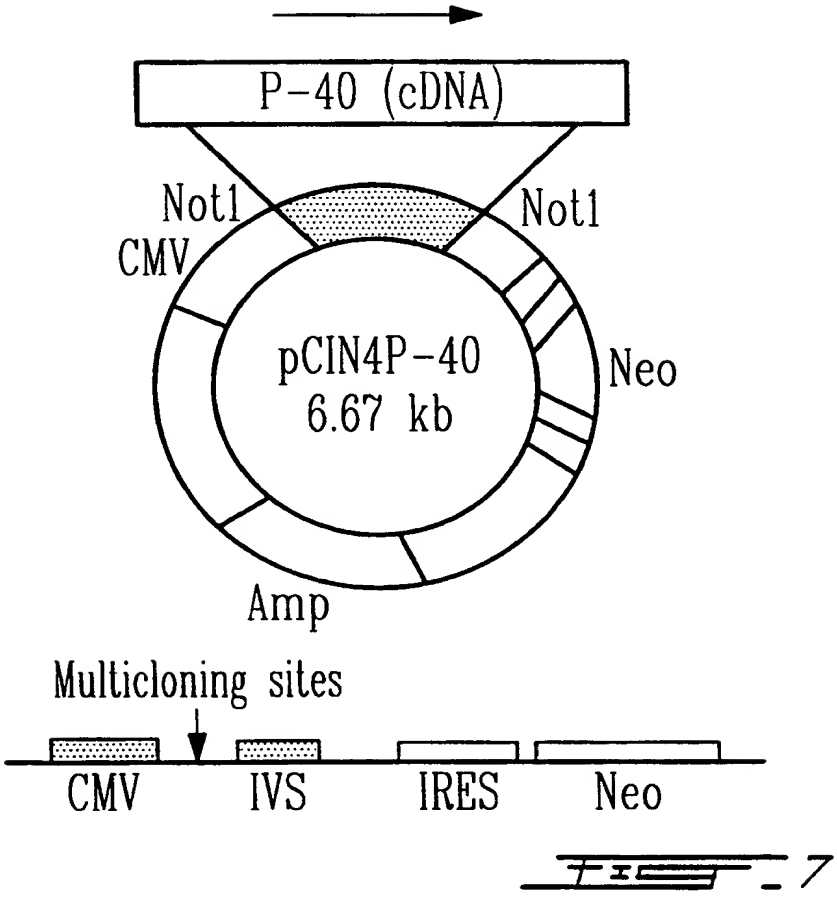

P-40 (cDNA)
Not1
Not1
CMV
pCIN4P-40
6.67 kb
Neo
Amp
Multicloning sites
CMV
IVS
IRES
Neo

Fig. 7


MCF-7/Adr (800X)
Vector-MCF-7 (600X)
P-40-MCF-7 (400X)

FIG - 8B

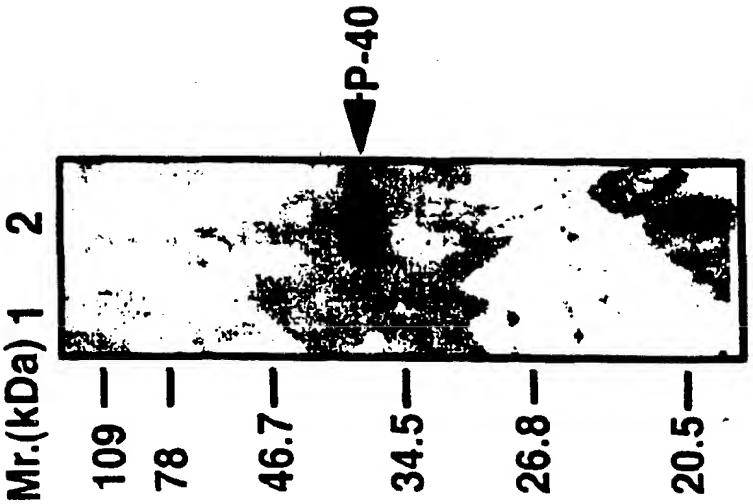

Mr.(kDa) 1 2
P-40
109
78
46.7
34.5
26.8
20.5

FIG - 8A

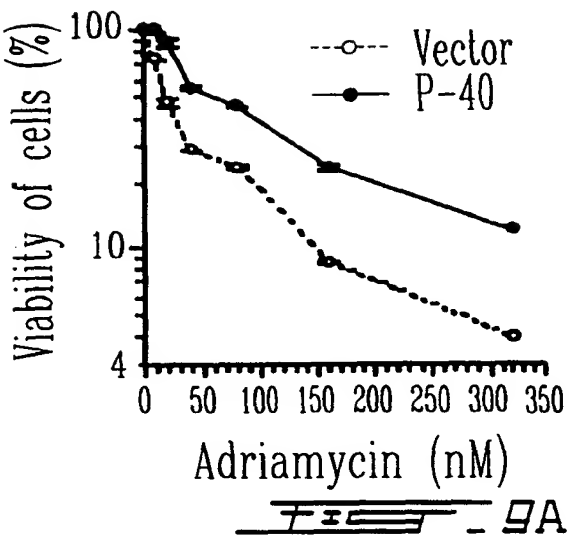


Fig. 9A

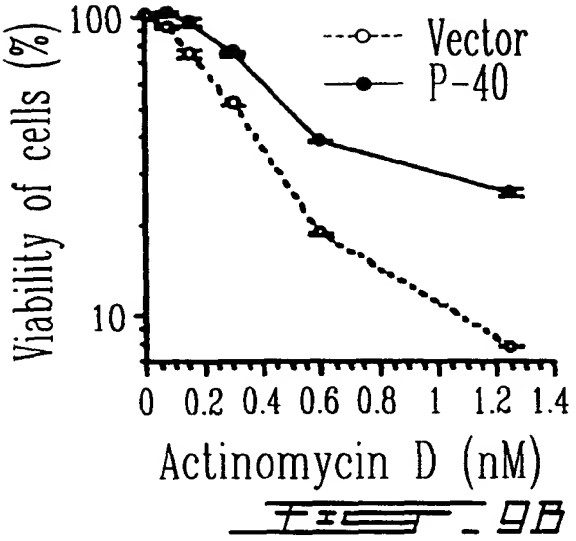


Fig. 9B

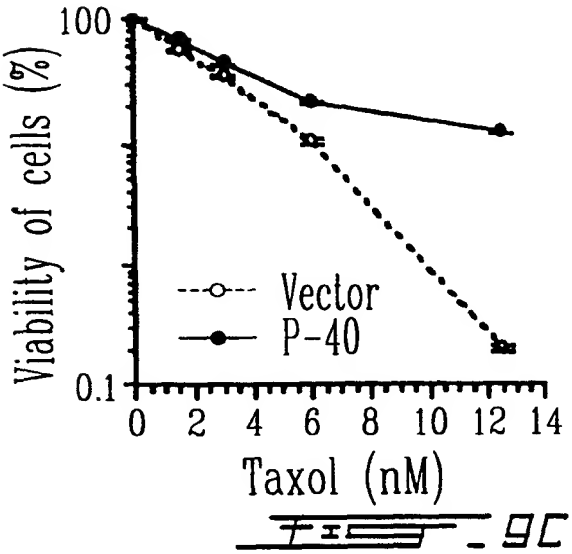


Fig. 9C

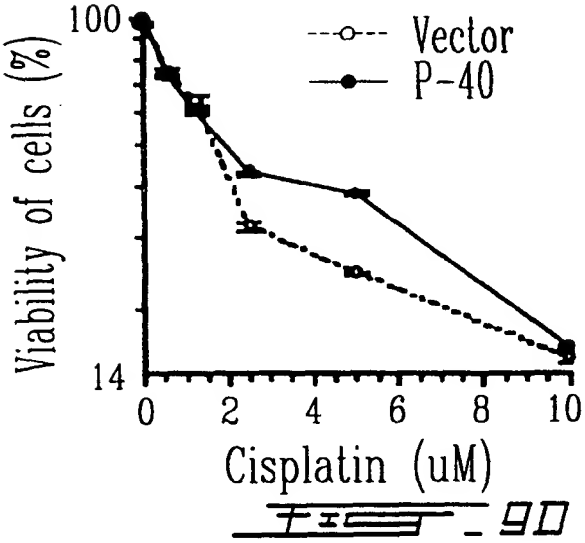


Fig. 9D

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